

Company name:



3.5inch QVGA TFT panel change (TCG035QVLPDANN-GN50-S)

2023/08/24

Kyocera Corporation
Corporate Display Group
Display Engineering Division
Product Engineering Department

Approval	Confirmation	Create
M.Kato	T.Fukui	Komurasaki

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Control No. : EDPM2-2307-A9-1396

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		Current product TCG035QVLPDANN-GN50-S	New Product TCG035QVLAFANN-GN50
Product Specifications	polarizing plate	Glare Type	NO CHANGE
	Interface	CMOS	NO CHANGE
	External dimensions	76.9(W)x63.9(H)x4.9(D) mm	NO CHANGE
	Display Mode	Normally White	NO CHANGE
	Operating temperature range	-20~70°C	NO CHANGE
	Storage temperature range	-30~80°C	NO CHANGE
	Power supply voltage (LCD)	Typ. 3.3V	NO CHANGE
	Current Consumption (LCD)	Typ. 8.0mA	Typ. 12.0mA
	LED Forward Voltage	Typ. 22.1V	NO CHANGE
	LED Forward Current	IF=15mA	NO CHANGE
	Backlight lifetime	Typ. 40,000hr (IF=15mA, Ta=25°C)	NO CHANGE

Above value is tentative. Please confirm to the specifications for the final value.



Ta=25°C			Current product TCG035QVLPDANN-GN50-S	New Product TCG035QVLAFANN-GN50
Optical properties	response speed	Rise	Typ. 8ms	NO CHANGE
		Down	Typ. 22ms	NO CHANGE
	Brightness (IF =15 mA, Middle)		Typ. 1000cd/m ²	Typ. 1200cd/m ²
	Contrast		Typ. 1000	NO CHANGE
	Field of view angle CR≥10	UPPER	Typ. 80deg	NO CHANGE
		LOWER	Typ. 60deg	NO CHANGE
		LEFT	Typ. 80deg	NO CHANGE
		RIGHT	Typ. 80deg	NO CHANGE
	chromaticity	Red	0.600±0.050, 0.350±0.050	NO CHANGE 
		Green	0.345±0.050, 0.580±0.050	0.325±0.050, 0.560±0.050
		Blue	0.160±0.050, 0.115±0.050	NO CHANGE 
		White	0.305±0.050, 0.330±0.050	NO CHANGE 

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Register setting

← = NO CHANGE FROM ORIGINAL SETTING

Reg#	Hex Code		Description
	TCG035QVLPDANN-GN50-S	TCG035QVLAFANN-GN50	
R01h	7300	←	Basic format
R02h	0200	←	Display driving
R03h	6464	6466	Power supply
R04h	04C7	←	Basic format
R05h	F444	←	
R06h	E860	←	Display driving
R08h	06FF	←	Power supply
R0Ah	4008	←	Display quality
R0Bh	D400	F000	Panel driving
R0Dh	422C	322A	Power supply
R0Eh	2D00	1080	
R0Fh	0000	←	Display driving
R16h	9F80	←	
R17h	2212	←	
R1Eh	006D	0067	Power supply
R30h	0001	0700	Display quality
R31h	0105	0507	
R32h	0000	←	
R33h	0102	0305	
R34h	0707	0307	
R35h	0206	0003	
R36h	0607	0207	
R37h	0201	0101	
R3Ah	1400	0000	
R3Bh	1400	0000	

Test items	Test conditions	Judgment Criteria	N	Results
High-temperature operation	70°C/Dry/500Hr	Function/Display: No abnormalities Current consumption: no abnormality	3	Pass
High temperature and high humidity operation	60°C/90%RH/500Hr		3	Pass
low-temperature operation	-20°C/Dry/500Hr		3	Pass
thermal shock	-30°C↔80°C/240Cycle		3	Pass
Vibration	2G/10~100Hz/↔5min Sine wave/X, Y, Z/2Hr each	Function/Display: No abnormalities	2	Pass
Impact	50G/11msec/sine half wave +/- X, +/- Y, +/- Z/3 times each		2	Pass

THE NEW VALUE FRONTIER



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Revision number	Symbols	Reviser	Revision date	Revised content
00	None	Yamawaki	2023/7/10	initial publication
01		Komurasaki	2023/8/9	— The values listed for current product have been changed to the latest spec values. P4 Add note. P5 Add note. P5 Change chromaticity P6 Add Register setting
02				
03				